

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An optical element module package comprising;

a laser diode for projecting optical signals;

a photo diode for monitoring the optical signals projected from the laser diode;

a stem having a first through-hole formed in a long-hole shape that is parallel to the diametrical direction of the stem;

a heat sink block protruding from one end of the stem, the heat sink block being adjacent to the first through-hole;

a sub-mount attached to one end of the heat sink block, the sub-mount having a circuit pattern formed on a surface thereof, wherein the sub-mount is mounted with the laser diode and the photo diode; and

a plurality of leads arranged in a row and provided in the first through-hole,

wherein the first through-hole is filled with a sealant of a glass material so that the stem and the plurality of leads are held together.

2-4. (Canceled)

5. (Original) The optical element module package according to claim 1, wherein the plurality of leads includes a DC bias lead for the laser diode, a radio-frequency signal lead, a lead for the monitoring photo diode, and at least one ground lead.

6. (Original) The optical element module package according to claim 1, wherein the plurality of leads include at least one ground lead and a radio-frequency signal lead for the laser diode.

7-9. (Canceled)

10. (Currently Amended) A method for manufacturing an optical element module package comprising the steps of:

providing a laser diode for projecting optical signals;

providing a photo diode for monitoring the optical signals projected from the laser diode,

providing a stem having an elongated through-hole formed in a long-hole shape extending

parallel to the diametrical direction of the stem;

providing a heat sink block protruding from a side of the stem, the heat sink block being adjacent to the through-hole;

mounting a sub-mount to one end of the heat sink block;

forming a circuit pattern formed on a surface of the submount;

mounting the laser diode and the photodiode on the sub-mount;

providing a lead frame having a plurality of leads extending in a direction away from a plate;

inserting the ends of the leads into the through-hole from one end of the stem and aligning the ends of the leads; and

sealing the through-hole with a sealant of a glass material.

11-13. (Cancelled)

14. (Original) The method according to claim 10, wherein the sealant is melted at a temperature of about 500 °C to seal the through-hole.

15. (Original) An optical element module package having a laser diode for projecting optical signals and a photo diode for monitoring the optical signals projected from the laser diode, comprising:

a stem having a first through-hole formed in a long-hole shape and a pair of second through-holes formed on the stem; and

a radio-frequency lead provided in the first through-hole and a plurality of leads provided in the second through-holes.

16. (Original) The optical element module package according to claim 15, wherein the radio frequency lead comprises a radio-frequency signal lead and a pair of ground leads.

17. (Original) The optical element module package according to claim 15, wherein the plurality of leads constitute a DC bias lead and lead for a photo diode.

18. (Original) The optical element module package according to claim 15, wherein the optical element module package is adaptively assembled onto a printed circuit board, so that the radio-frequency lead provided in the first through-hole is electrically coupled to the upper top side of the circuit board, and the plurality of leads provided in the second through-holes are electrically coupled to the lower side of the circuit board.

19. (Original) The optical element module package according to claim 18, wherein the distance between the first and second through holes is selectively adjusted in accordance with the thickness of the circuit board.

20. (Original) The optical element module package according to claim 15, wherein the stem has a heat sink block protruding from one end thereof, the heat sink block being positioned between the second through-holes adjacent to the first through-hole.

21. (Original) The optical element module package according to claim 15, wherein the first and second through-hole is filled with a sealant of a glass material so that the stem and all leads are held together.

22. (Currently Amended) The optical element module package according to claim ~~3~~1, wherein the sub-mount contains a 'V' shaped notch disposed at one end of the submount.

23. (Currently Amended) The method according to claim ~~13~~10, further comprising the steps of providing the sub-mount with a 'V' shaped notch.